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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,935	02/06/2004	Michael L. Jackson	A01495	7968

21898 7590 08/01/2006

ROHM AND HAAS COMPANY  
PATENT DEPARTMENT  
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EXAMINER
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MULLIS, JEFFREY C

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/773,935

Applicant(s)

JACKSON ET AL.

Examiner

Jeffrey C. Mullis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

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All remaining rejections follow.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "polyfunctional acrylic monomer" as recited in at least claims 6 and 1 is unclear in that an acrylic monomer has one functional group (the acrylic portion) and is not polyfunctional and a monomer is generally not viewed in that art as encompassed by a (monomeric) material such as a monomer.

The term "dimethanol propionic carboxyl" is not art recognized and is therefore unclear as is recited in at least "iv" of claim 5.

It is unclear if the functional groups of "i" – "vii" of claim 5 apply to the MPP copolymer since the functional groups immediately precede only the "isotactic MPP"

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rieger et al. (DE 4227217).

Patentees disclose a composition containing poly alpha olefin "a" (German Language Abstract) such as an "isotactic polypropylene" with a terminal hydroxyl group derived from an isotactic polypropylene with a terminal olefinic group having a molecular weight of 1100 (CAPLUS Abstract). The composition also contains maleic anhydride grafted EP copolymer as in applicants carboxyl functional reactant or epoxy resin as in "iv" and "v" respectively. Note the CAPLUS Abstract. Note that the poly alpha olefin "a" those terminated by epoxy or carboxyl at page 3, lines 1-7.

No specific examples exist in the patent showing applicants combination of reactants such as those of "iv" and "v" of applicants' claims 5. However choice of applicants combination of features from the patent would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of adequate results absent any showing of surprising or unexpected results.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanna (US 2004/0059046).

Patentees disclose the "reaction product" (patent claim 7) of an isotactic polypropylene which may have functional groups such as epoxy, carboxyl or alcohol

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(note the last 11 lines of patent claim 1 from which claims 6 and 7 depend) and butadiene acrylates or acrylic copolymers or epoxy resins (patent claims 6 and 7) such as is embraced by applicants "polyfunctional acrylic monomer (polymer ?)" or carboxyl functional acrylic or reactant as in "iv" and "v" of claim 5. Note use of chlorinated PVC in paragraph 74. It is noted that the above publishes application is assigned to Baker Hughes and the page 6, line 25 of the instant specification indicates that Baker Hughes makes MPP's suitable for applicants invention.

No specific examples exist in the patent showing applicants combination of reactants such as those of "iv" and "v" of applicants' claims 5. However choice of applicants combination of features from the patent would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of adequate results absent any showing of surprising or unexpected results.

Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Fujita et al (US 5,130,371).

Fujita discloses a composition containing a homopolypropylene graft polymer and polycarbonate. Note for instance Example 13. Note that the only conditions disclosed for producing homopolypropylene are that for producing isotactic polypropylene with Zeigler Natta catalyst at column 5, lines 28-33. Note column 6, lines 61-66 where it is disclosed that grafting of polypropylene with maleic anhydride under free radical polymerization conditions results in anhydride groups introduced almost solely at the point of chain scission, i.e. at the terminal of the newly formed maleienated

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polypropylene. Note the examples for polypropylene containing 4% maleic anhydride for which a number average molecular weight of about 2,000 can be calculated based on one maleic anhydride present only at the chain ends. Note that the Abstract discloses that the polypropylene polyolefin is reacted with a "hydroxyl ended polylactone", as in applicants "hydroxyacid" in that a polylactone would be expected to normally contain a carboxyl end unit and a hydroxyl end unit.

Applicant's arguments filed 7-6-06 have been fully considered but they are not persuasive.

Rieger suggests applicants material "iv" and "v" as set out in the above rejection.

With re to Hanna, the term "about" 60% embraces amounts somewhat less than 60% since about allows for some leeway. Patent claims 6 and 7 disclose butadiene acrylates or acrylic copolymers as in applicants polyfunctional acrylic monomer and species encompassed by "iv" and "v" of instant claim 5.

Fujitas polypropylenes are made using Zeigler Natta catalysts such as generally result in isotactic polypropylenes. Patentees polylactone reads on applicants hydroxyacid.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Jeffrey C. Mullis at telephone number 571 272 1075.

Jeffrey C. Mullis  
J Mullis  
Art Unit 1711

JCM

7-26-06

**Jeffrey Mullis**  
**Primary Examiner**  
**Art Unit 1711**

A handwritten signature in black ink, appearing to be 'JCM', is written over the printed name and title of the examiner.